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| CUMMINS-ALLISON CORP.<br>C/O NIXON PEABODY LLP<br>300 S. Riverside Plaza<br>16th Floor<br>CHICAGO, IL 60606 |             |                      | SWARTZ, JAMIE H     |                  |
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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

*Ex parte* DOUGLAS U. MENNIE,  
WILLIAM J. JONES, and  
MARK C. MUNRO

Appeal 2009-006570  
Application 10/084,856  
Technology Center 3600

Decided: December 28, 2009

Before HUBERT C. LORIN, ANTON W. FETTING, and  
BIBHU R. MOHANTY, *Administrative Patent Judges*.  
FETTING, *Administrative Patent Judge*.

## DECISION ON APPEAL

1 STATEMENT OF THE CASE

2 Douglas U. Mennie, William J. Jones, and Mark C. Munro (Appellants)  
3 seek review under 35 U.S.C. § 134 (2002) of a final rejection of claims 258-  
4 261 and 267-270, the only claims pending in the application on appeal.

5 We have jurisdiction over the appeal pursuant to 35 U.S.C. § 6(b)  
6 (2002).

7 SUMMARY OF DECISION<sup>1</sup>

8 We AFFIRM.

9 THE INVENTION

10 The Appellants invented a document processing system and automatic  
11 teller machine and currency redemption machine (Specification 1:5-6).

12 An understanding of the invention can be derived from a reading of  
13 exemplary claim 258, which is reproduced below [bracketed matter and  
14 some paragraphing added].

15 258. A method of redeeming currency from a customer at a  
16 self-service machine, comprising:

17 [1] receiving money input by said customer, said act of  
18 receiving money input by said customer comprising

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<sup>1</sup> Our decision will make reference to the Appellants' Appeal Brief ("App. Br.," filed September 10, 2008) and Reply Brief ("Reply Br.," filed January 15, 2009), and the Examiner's Answer ("Ans.," mailed November 21, 2008), and Final Rejection ("Final Rej.," mailed December 31, 2007).

1 substantially simultaneously receiving, in a bulk coin  
2 receptacle, randomly oriented bulk coins input by said  
3 customer;

4 [2] singulating the bulk coins using a coin separation device;

5 [3] discriminating between authentic and non-authentic  
6 forms of said money including discriminating between valid  
7 coins and invalid coins of said bulk coins;

8 [4] determining a total value of said authentic forms of said  
9 money input by said customer; and

10 [5] dispensing a card having a storage medium for storing a  
11 monetary value that is related to said total value.

## THE REJECTIONS

The Examiner relies upon the following prior art<sup>2</sup>:

Avnet et al. US 5,291,003 Mar. 1, 1994  
Smith et al. US 5,641,050 Jun. 24, 1997

Claims 258-261 and 267-270 stand rejected under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement.

Claims 258-261 and 267-270 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Appellants regard as the invention.

Claims 258-261 and 267-270 stand rejected under 35 U.S.C. § 103(a) as unpatentable over Smith and Avnet.

1

2

## ISSUES

3 The issues pertinent to this appeal are:

- 4     • Whether the Appellants have sustained the burden of showing that the  
5         Examiner erred in rejecting claims 258-261 and 267-270 under 35  
6         U.S.C. § 112, first paragraph, for failing to comply with the written  
7         description requirement.
  - 8             ○ This pertinent issue turns on whether the specification describes  
9                 a bulk coin receptacle and accepting bulk coins such as a person  
10                 with ordinary skill in art would have understood that the  
11                 Appellants had possession of the claimed invention.
- 12     • Whether the Appellants have sustained the burden of showing that the  
13         Examiner erred in rejecting claims 258-261 and 267-270 under 35  
14         U.S.C. § 112, second paragraph, as being indefinite for failing to  
15                 particularly point out and distinctly claim the subject matter which the  
16                 Appellants regard as the invention.
  - 17             ○ This pertinent issue turns on whether the use of the term  
18                 “singulating” renders the claims indefinite.
- 19     • Whether the Appellants have sustained the burden of showing that the  
20         Examiner erred in rejecting claims 258-261 and 267-270 under 35  
21         U.S.C. § 103(a) as unpatentable over Smith and Avnet.

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<sup>2</sup> The Examiner has also included the reference Tran et al. (US 5,440,108) as a cited reference but has not relied on this reference in the rejection of the claims.

1           ○ This pertinent issue turns on whether Smith and Avnet  
2           describes limitations [1], [2], and [5] of the claim 258.

3

## FACTS PERTINENT TO THE ISSUES

5 The following enumerated Findings of Fact (FF) are believed to be  
6 supported by a preponderance of the evidence.

## 7      *Facts Related to Appellants' Disclosure*

8        01. A hopper receives coins of mixed denominations and feeds  
9           them through central openings in a housing and coin guiding  
10          member in the form of an annular sorting head or guide plate  
11          inside or underneath the housing (Specification 126:6-10 and Figs.  
12          58-60)

## 13 *Facts Related to the Prior Art*

14 *Avnet*

15 02. Avnet is directed to a method and apparatus for dispensing cash  
16 cards (Avnet 1:17-19).

17 03. Avnet describes an apparatus for dispensing cash cards (Avnet  
18 2:64-66). The apparatus provides a user with payment options for  
19 the purchase of a cash card or for adding credit to a cash card  
20 (Avnet 3:34-37). When a cash card is purchased, it is dispensed  
21 by a cash card dispensing unit (Avnet 3:43-45). If the user  
22 chooses to add value to the cash card, the user inserts the cash  
23 card into the apparatus and the apparatus evaluates and adjusts the  
24 value of the cash card accordingly (Avnet 3:45-51).

1                   *Smith*

2                   04. Smith is directed to unattended dispensing machines that permit  
3                   access using a plurality of payment means including data cards  
4                   (Smith 1:24-28).

5                   05. Smith describes a machine for dispensing products or services,  
6                   such as a data card (Smith 6:53-56). The machine includes a coin  
7                   acceptor and a dispensing controller (Smith 9:31-36). A bill  
8                   accepter may also be connected to the coin acceptor (Smith 9:60-  
9                   63). The coin acceptor is an apparatus which is capable of  
10                  receiving coins and processing the coin inputs so as to determine  
11                  the validity and value of the coins and further determines the total  
12                  monetary deposit (Smith 10:31-44). The coin acceptor further  
13                  provides information relating to the coins received (Smith 10:31-  
14                  44). The advantage of including a coin acceptor is that items can  
15                  be purchased using pocket change (Smith 10:48-50).

16                  *Facts Related To The Level Of Skill In The Art*

17                  06. Neither the Examiner nor the Appellants have addressed the  
18                  level of ordinary skill in the pertinent arts of vending systems and  
19                  financial products. We will therefore consider the cited prior art as  
20                  representative of the level of ordinary skill in the art. *See Okajima*  
21                  *v. Bourdeau*, 261 F.3d 1350, 1355 (Fed. Cir. 2001) (“[T]he  
22                  absence of specific findings on the level of skill in the art does not  
23                  give rise to reversible error ‘where the prior art itself reflects an  
24                  appropriate level and a need for testimony is not shown’”)

1 (quoting *Litton Indus. Prods., Inc. v. Solid State Sys. Corp.*, 755  
2 F.2d 158, 163 (Fed. Cir. 1985).

3 *Facts Related To Secondary Considerations*

4 07. There is no evidence on record of secondary considerations of  
5 non-obviousness for our consideration.

6 PRINCIPLES OF LAW

7 *Written Description*

8 The first paragraph of 35 U.S.C. 112 requires that the specification  
9 shall contain a written description of the invention. This requirement is  
10 separate and distinct from the enablement requirement. *See, e.g., Vas-Cath,*  
11 *Inc. v. Mahurkar*, 935 F.2d 1555, 1560 (Fed. Cir. 1991).

12 The “written description” requirement implements the principle  
13 that a patent must describe the technology that is sought to be  
14 patented; the requirement serves both to satisfy the inventor’s  
15 obligation to disclose the technologic knowledge upon which  
16 the patent is based, and to demonstrate that the patentee was in  
17 possession of the invention that is claimed.

18 *Capon v. Eshhar*, 418 F.3d 1349, 1357 (Fed. Cir. 2005).

19 One shows that one is “in possession” of *the invention* by  
20 describing *the invention*, with all its claimed limitations, not  
21 that which makes it obvious. [*Vas-Cath Inc. v. Mahurkar*, 935  
22 F.2d 1555, 1563-64 (Fed. Cir. 1991)] (“[T]he applicant must  
23 also convey to those skilled in the art that, as of the filing date  
24 sought, he or she was in possession of *the invention*. The  
25 invention is, for purposes of the ‘written description’ inquiry,  
26 *whatever is now claimed.*”) (emphasis in original). One does  
27 that by such descriptive means as words, structures, figures,  
28 diagrams, formulas, etc., that fully set forth the claimed  
29 invention. Although the exact terms need not be used *in haec*  
30 *verba*, *see Eiselstein v. Frank*, 52 F.3d 1035, 1038 . . .  
31 (Fed.Cir.1995) (“[T]he prior application need not describe the

1       claimed subject matter in exactly the same terms as used in the  
2       claims . . . .”), the specification must contain an equivalent  
3       description of the claimed subject matter.

4       *Lockwood v. Am. Airlines, Inc.*, 107 F.3d 1565, 1572 (Fed. Cir. 1997)

5       It is the disclosures of the applications that count. Entitlement  
6       to a filing date does not extend to subject matter which is not  
7       disclosed, but would be obvious over what is expressly  
8       disclosed. It extends only to that which is disclosed. While the  
9       meaning of terms, phrases, or diagrams in a disclosure is to be  
10       explained or interpreted from the vantage point of one skilled in  
11       the art, all the limitations must appear in the specification. The  
12       question is not whether a claimed invention is an obvious  
13       variant of that which is disclosed in the specification. Rather,  
14       [an] application itself must describe an invention, and do so in  
15       sufficient detail that one skilled in the art can clearly conclude  
16       that the inventor invented the claimed invention as of the filing  
17       date sought.

18       *id* at 1571-72.

19       ***Indefiniteness***

20       The test for definiteness under 35 U.S.C. § 112, second paragraph, is  
21       whether “those skilled in the art would understand what is claimed when the  
22       claim is read in light of the specification.” *Orthokinetics, Inc. v. Safety*  
23       *Travel Chairs, Inc.*, 806 F.2d 1565, 1576 (Fed. Cir. 1986) (citations  
24       omitted).

25

26       ***Obviousness***

27       A claimed invention is unpatentable if the differences between it and  
28       the prior art are “such that the subject matter as a whole would have been  
29       obvious at the time the invention was made to a person having ordinary skill

<sup>1</sup> in the art.” *KSR Int’l Co. v. Teleflex Inc.*, 550 U.S. 398, 406 (2007); *Graham v. John Deere Co.*, 383 U.S. 1, 13-14 (1966).

3        In *Graham*, the Court held that that the obviousness analysis is  
4        bottomed on several basic factual inquiries: “[1] the scope and content of  
5        the prior art are to be determined; [2] differences between the prior art and  
6        the claims at issue are to be ascertained; and [3] the level of ordinary skill  
7        in the pertinent art resolved.” *Graham*, 383 U.S. at 17. *See also KSR*, 550  
8        U.S. at 406. “The combination of familiar elements according to known  
9        methods is likely to be obvious when it does no more than yield predictable  
10      results.” *KSR*, 550 U.S. at 416.

## ANALYSIS

12           *Claims 258-261 and 267-270 rejected under 35 U.S.C. § 112, first*  
13           *paragraph, for failing to comply with the written description requirement*

14 The Examiner found that the specification fails to describe the features  
15 of a bulk coin receptacle and the acceptance of bulk coins. Ans. 3-4. The  
16 Appellants contend that the specification describes a bulk coin receptacle  
17 (“hopper”) and the acceptance of bulk coins such that a person with ordinary  
18 skill in the art would have understood the Appellants were in possession of  
19 the claimed invention. App. Br. 5-11 and Reply Br. 2-13

20 We agree with the Appellants. The specification describes that mixed  
21 coins are input into a hopper. FF 01. A bulk coin receptacle can be any  
22 receptacle that can hold a plurality of coins. Figures 58-60 explicitly show  
23 that the hopper is capable of holding a plurality of mixed coins and a hopper  
24 accepts a plurality of coins. FF 01. As such, a person with ordinary skill in

1 the art would have understood that the Appellants had possession of the  
2 claimed invention by the written disclosure.

3 The Appellants have sustained the burden of showing that the Examiner  
4 erred in rejecting claims 258-261 and 267-270 under 35 U.S.C. § 112, first  
5 paragraph, for failing to comply with the written description requirement.

6

7 *Claims 258-261 and 267-270 rejected under 35 U.S.C. § 112, second  
8 paragraph, as being indefinite for failing to particularly point out and  
9 distinctly claim the subject matter which the Appellants regard as the  
10 invention*

11 The Examiner found that claims 258-261 and 267-270 recite the term  
12 “singulating” which is not found an English dictionary and is not defined by  
13 the specification. Ans. 4. The Examiner found that without a specific  
14 definition in the specification for this term, the recited claims are indefinite  
15 as recited. Ans. 4. The Appellants contend that the term “singulation” is a  
16 common term in the art and the specification provides a context for the  
17 usage of the term. App. Br. 12-14. The Appellants further provide a  
18 reference in the art that use the term “singulation” in support of the  
19 contention that this term is known in the art. Reply Br. 14-17.

20 We agree with the Appellants. The test for indefiniteness requires that a  
21 person of ordinary skill in the art would understand what is being claimed.  
22 Martin et al., as noted by the Appellants describes the usage of the term  
23 “singulating” to mean to make single and not commingled with other coins.  
24 Reply Br. 15. This meaning of the term “singulating” is consistent with its  
25 usage in the present invention. Although the Examiner found that this term

1 has multiple meanings, the test for indefiniteness is whether a person of  
2 ordinary skill in this art would understand what is being claimed. Since the  
3 Appellants have demonstrated that this term is known a person with ordinary  
4 skill in the art, claims 258-261 and 267-270 are not indefinite.

5 The Appellants have sustained the burden of showing that the Examiner  
6 erred in rejecting claims 258-261 and 267-270 under 35 U.S.C. § 112,  
7 second paragraph, as being indefinite for failing to particularly point out and  
8 distinctly claim the subject matter which the Appellants regard as the  
9 invention.

10

11 *Claims 258-261 and 267-270 rejected under 35 U.S.C. § 103(a) as*  
12 *unpatentable over Smith and Avnet*

13 The Appellants first contend that (1) Smith fails to describe the  
14 dispensing of any items, including dispensing cards, as required by  
15 limitation [5] of claim 258 (App. Br. 16 and Reply Br. 20-22) and (2) the  
16 Examiner has not established a *prima facie* case of obviousness and has  
17 relied on impermissible hindsight in constructing an obviousness rejection  
18 (Reply Br. 17-18 and App. Br. 17-18). We disagree with the Appellants.

19 First, the Examiner has relied on Avnet to describe the dispensing of a  
20 card with a stored monetary value, where Avnet describes the dispensing of  
21 cash cards that have a stored monetary value associated with the card. FF  
22 03. As such, the Appellants' contention that Smith fails to describe this  
23 feature does not persuade us of error on the part of the Examiner because the  
24 Appellants are responding to the rejection by attacking the references  
25 separately, even though the rejection is based on the combined teachings of

1 the references. Nonobviousness cannot be established by attacking the  
2 references individually when the rejection is predicated upon a combination  
3 of prior art disclosures. *See In re Merck & Co. Inc.*, 800 F.2d 1091, 1097  
4 (Fed. Cir. 1986).

5 Smith is concerned with providing customers with a dispensing  
6 apparatus that accepts multiple forms of payment. FF 04. Smith  
7 accomplishes this by providing a dispensing machine that includes several  
8 payment options, including a coin acceptor which discussed in more detail  
9 *infra*. FF 05. Avnet is also concerned with providing a product through the  
10 use of a vending machine. FF 02. Avnet also provides a machine that  
11 accepts payment for the purchase of a cash card or for adjusting the value of  
12 a cash card. FF 03.

13 A person with ordinary skill in the art would have recognized to  
14 combine Smith and Avnet in order to have similar dispensing machines  
15 dispense additional products, including cards with a monetary value. As  
16 such, a person with ordinary skill in the art would have found it obvious to  
17 combine Smith and Avnet. Furthermore, since both Smith and Avnet are  
18 concerned with dispensing machines, a person with ordinary skill in the art  
19 would have been lead from Smith to Avnet to incorporate advantages  
20 provided by Avnet. Dispensing a cash card is one such advantage. As such,  
21 the Examiner did not merely reconstruct the claimed invention using  
22 impermissible hindsight. Furthermore, the Examiner made these fact  
23 findings and provided this rationale for combining the prior art thereby  
24 properly establishing a *prima facie* case of obviousness.

1        The Appellants additionally contend that (3) Smith and Avnet fail to  
2        describe singulating the bulk coins using a coin separation device, as  
3        required by limitation [2] of claim 258. App. Br. 18-19 and Reply Br. 19.  
4        We disagree with the Appellants. Smith describes a dispensing machine that  
5        includes a coin acceptor. FF 05. The coin acceptor receives coins input by a  
6        customer. FF 05. The coin acceptor further determines the validity and  
7        value of each coin. FF 05. That is, the coin acceptor must examine each  
8        coin individually.

9        The individual examination of each coin suggests that each coin is  
10        separately evaluated, which also requires that the coins are physically  
11        separated. The coins can further be separated based on whether a coin is  
12        valid or not. FF 05. As such, the coin acceptor serves as a device that  
13        separates coins in multiple ways. The Appellants also argue that coins in  
14        Smith are not sorted; however, the claims do not require a feature of sorting  
15        the coins. As such, this argument is not found persuasive.

16        The Appellants contention that Avnet fails to describe this limitation is  
17        not found persuasive since the Examiner has relied on Smith to describe this  
18        limitation. Nonobviousness cannot be established by attacking the  
19        references individually when the rejection is predicated upon a combination  
20        of prior art disclosures. *Id.*

21        The Appellants also contend that (4) Smith and Avnet fail to describe  
22        limitation [1] of claim 258 and the same limitation in claims 268-270. App.  
23        Br. 18-19 and Reply Br. 19-20. We disagree with the Appellants.  
24        Limitation [1] requires receiving money, input substantially simultaneously  
25        by a customer, in a bulk coin receptacle, where the coins are randomly

1 oriented. Smith describes a coin acceptor that receives customer input coins  
2 and determines the validity and value of each coin. FF 05. Smith further  
3 contemplates that the coin acceptor can accept a plurality of coins, such as  
4 an amount equal to pocket change. FF 05.

5 Under the broadest reasonable interpretation, a bulk coin receptacle can  
6 mean a coin acceptor capable of receiving a plurality of coins, such as the  
7 number of coins in pocket change. Also, under the broadest reasonable  
8 interpretation randomly oriented coins include coins of different validity and  
9 different value. As such, Smith describes a coin acceptor that is capable of  
10 receiving a bulk amount of coins that may be randomly oriented. The coins  
11 are input for a single transaction, which is in a substantially simultaneous  
12 time frame. As such, Smith describes this feature of claims 258-261 and  
13 267-270.

14 The Appellants contention that Avnet fails to describe this limitation is  
15 not found persuasive since the Examiner has relied on Smith to describe this  
16 limitation. Nonobviousness cannot be established by attacking the  
17 references individually when the rejection is predicated upon a combination  
18 of prior art disclosures. *Id.*

19 The Appellants have not sustained the burden of showing that the  
20 Examiner erred in rejecting claims 258-261 and 267-270 under 35 U.S.C.  
21 § 103(a) as unpatentable over Smith and Avnet.

22

## CONCLUSIONS OF LAW

The Appellants have sustained the burden of showing that the Examiner erred in rejecting claims 258-261 and 267-270 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement.

The Appellants have sustained the burden of showing that the Examiner erred in rejecting claims 258-261 and 267-270 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Appellants regard as the invention.

The Appellants have not sustained the burden of showing that the Examiner erred in rejecting claims 258-261 and 267-270 under 35 U.S.C. § 103(a) as unpatentable over Smith and Avnet.

## DECISION

To summarize, our decision is as follows.

- The rejection of claims 258-261 and 267-270 under 35 U.S.C. § 112, first paragraph, for failing to comply with the written description requirement is not sustained.
- The rejection of claims 258-261 and 267-270 under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the Appellants regard as the invention is not sustained.
- The rejection of claims 258-261 and 267-270 under 35 U.S.C. § 103(a) as unpatentable over Smith and Avnet is sustained.

Appeal 2009-006570  
Application 10/084,856

1

2 No time period for taking any subsequent action in connection with this  
3 appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv).

4

5 **AFFIRMED**

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10

## 11 Address

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